

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
17 February 2005 (17.02.2005)

PCT

(10) International Publication Number
WO 2005/014980 A1

- (51) International Patent Classification⁷: **F01D 17/16**, 5/28, 5/14
- (21) International Application Number: **PCT/EP2003/008936**
- (22) International Filing Date: 12 August 2003 (12.08.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (71) Applicant (for all designated States except US): **HONEYWELL INTERNATIONAL INC.** [US/US]; 101, Columbia Road, Morristown, NJ 07962 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **FIGURA, Giorgio** [IT/FR]; c/o HONEYWELL GARRETT, B.P. 19-Z.I. Route d'Oncourt, F-88150 Thaon-les-Vosges (FR). **TISSERANT, Denis** [FR/FR]; c/o HONEYWELL GARRETT, B.P. 19-Z.I. Route d'Oncourt, F-88150 Thaon-les-Vosges (FR). **WABINSKI, Guillaume** [FR/FR]; c/o HONEYWELL GARRETT, B.P. 19-Z.I. Route d'Oncourt, F-88150 Thaon-les-Vosges (FR).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW). Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM). European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/014980 A1

(54) Title: VARIABLE NOZZLE DEVICE MADE FROM SHEET METAL

(57) Abstract: A variable nozzle device is provided which comprises an annular nozzle passage (5) formed by a gap between two opposing wall members (1, 3) and at least one vane (7) extending in said nozzle passage (5) and being rotatably supported. Said vane (7) is formed by a sheet metal contour and attached to a shaft (9).